

# It's Alive

Developing Creature Movement, Personality and Presentation

**Amy Drobeck**

Senior Animator, WB Games/Monolith

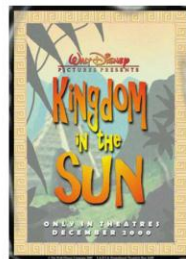
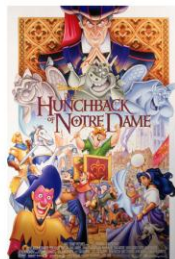
# My Education, Studios and Products



ARTS  
MAGNET  
ALUMNI  
ASSOCIATION



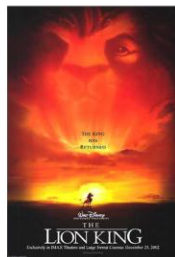
WALT DISNEY  
FEATURE  
ANIMATION



VCA  
Animal Hospitals



snowblind  
studios



# Animal and Creature Animation

## A Breakdown of Principles and Process

- Inspiration and Understanding
- Anatomy and It's application to Rigging and Animation
- Animation: An Overview of Base Movement
- Emoting and Character Development
- Cinematics: Telling the Story



# Inspiration and Understanding

- Observation through Life and Media
- Recording Observations through Drawing
- Experience through Exposure





# Observation through Life and Media



# Recording Observations

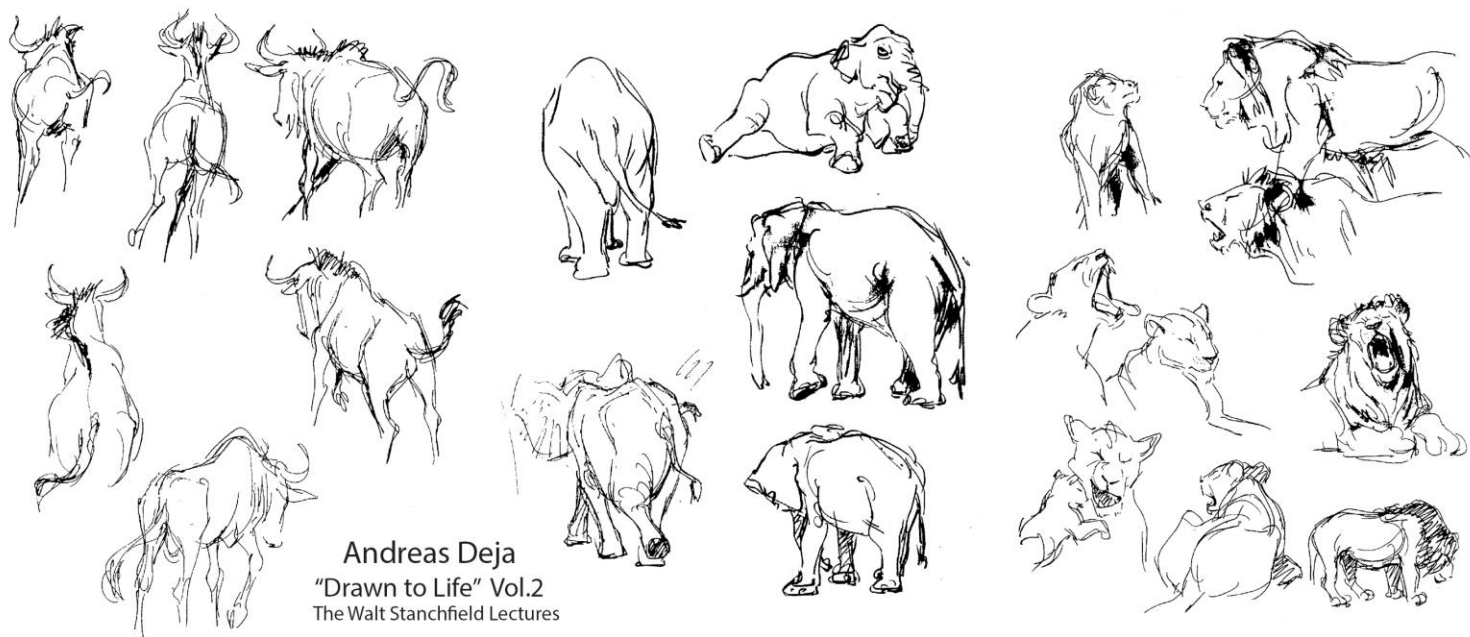


# Sketches





# Observation through Life and Media



Andreas Deja  
"Drawn to Life" Vol.2  
The Walt Stanchfield Lectures



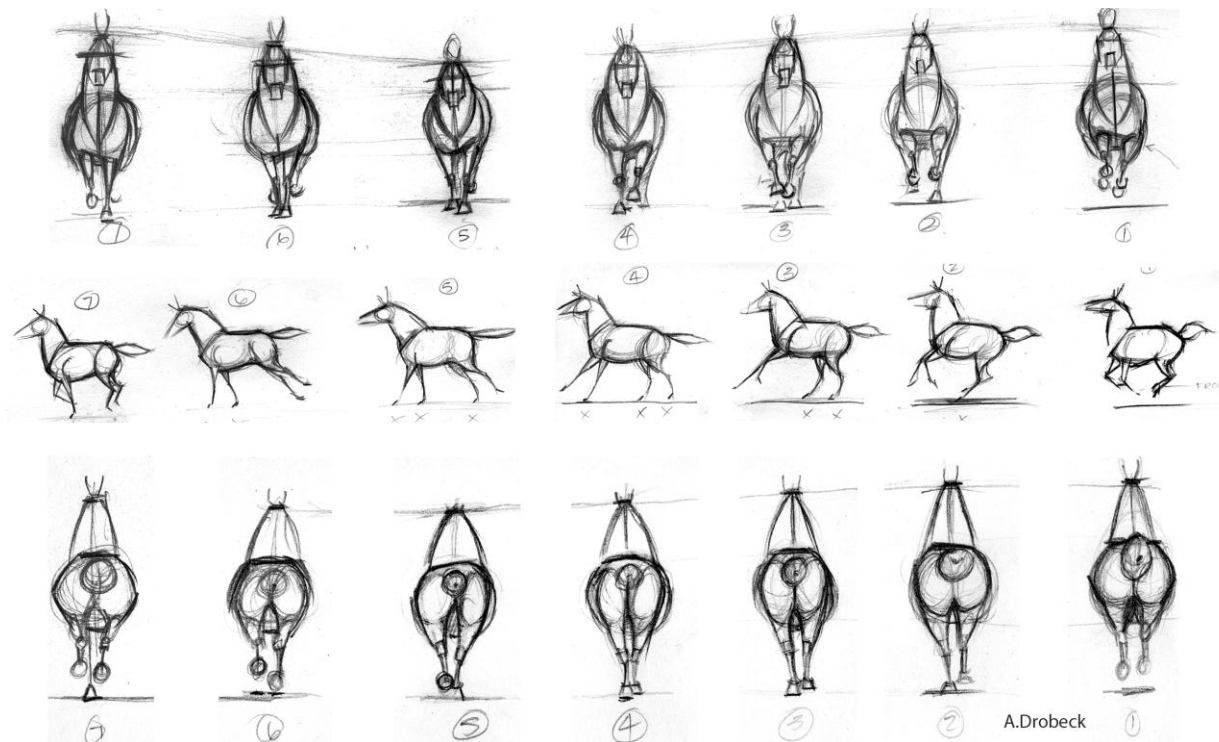
# Experience through Exposure

- HANDS ON, Direct Experience





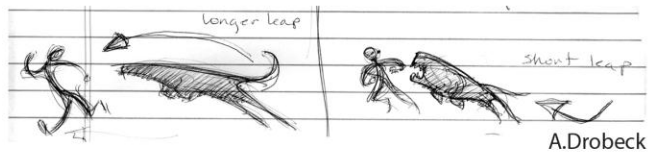
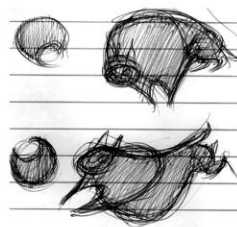
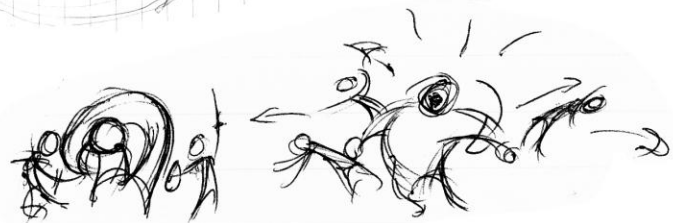
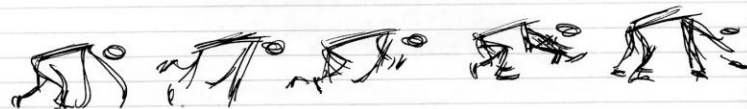
# Applying Observations to Practice



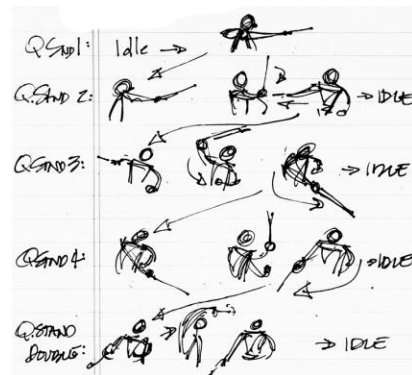
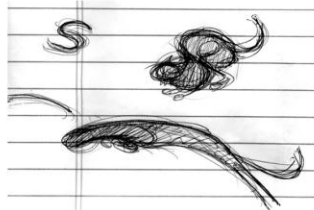
# Thumbnails



· INTRO ATTACK ·  
run cycle → LEAP ATTACK



A. Drobeck

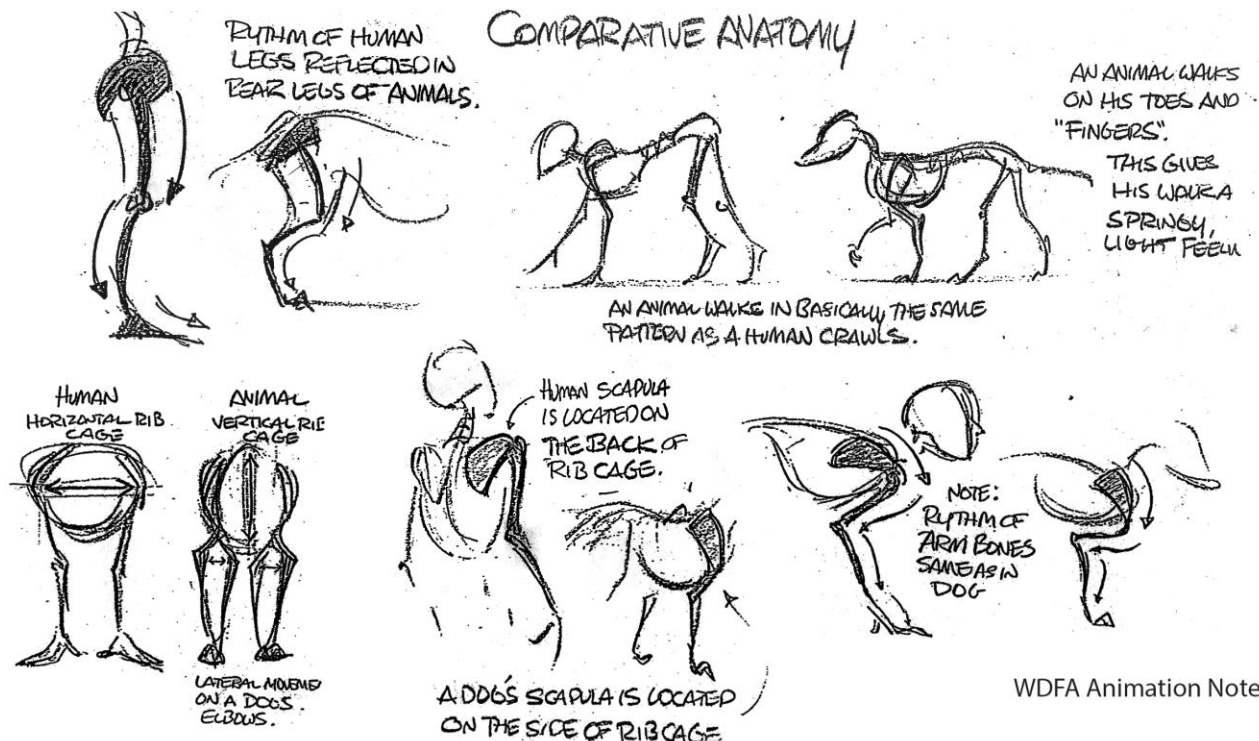


# Anatomy and it's Application to Rigging and Animation

- Understanding through Comparative Anatomy
- Understanding anatomy in movement
- Breaking the Skeleton Down to More Manageable Components
- Brief walkthrough of the Great Eagle rig.



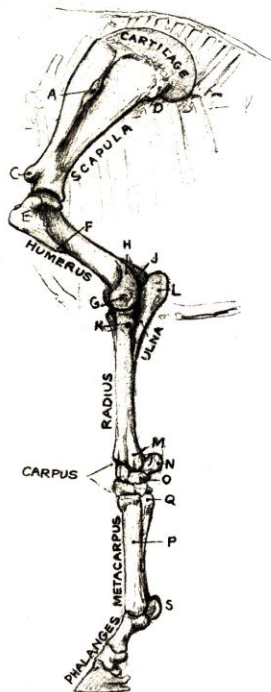
# Comparative Anatomy- Disney Notes



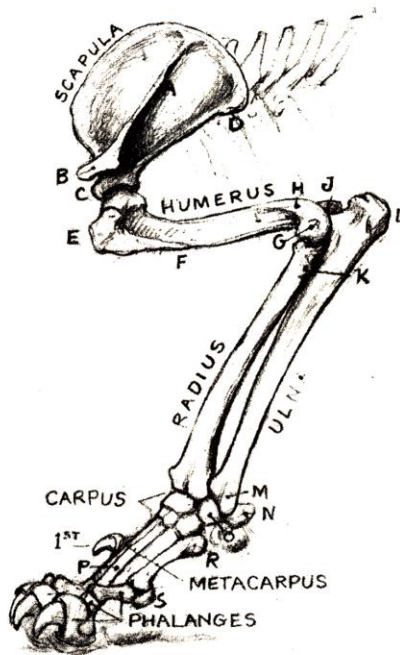
WDA Animation Notes



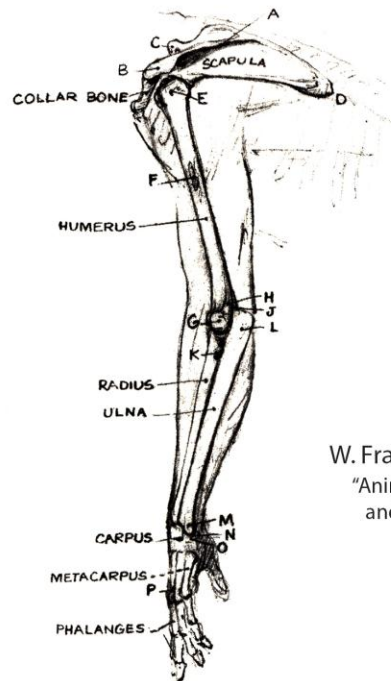
# Comparative Anatomy- Arms



61. BONES OF FORE LIMB OF HORSE



BONES OF FORE LIMB OF LION



ARM OF MAN



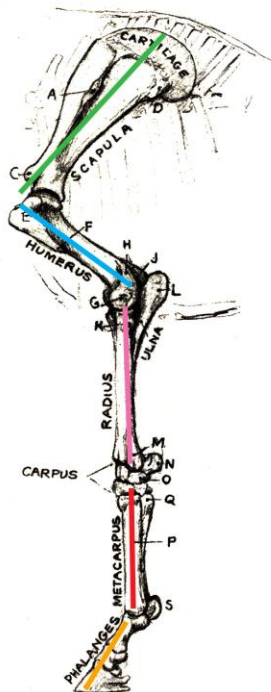
BONES OF FORE LIMB OF DOG

W. Frank Calderon  
"Animal Painting  
and Anatomy"

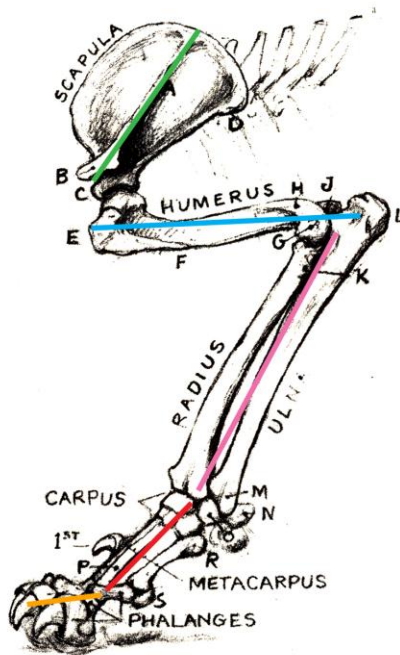




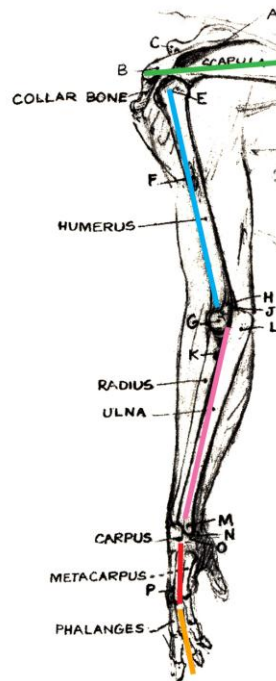
# Comparative Anatomy- Arms



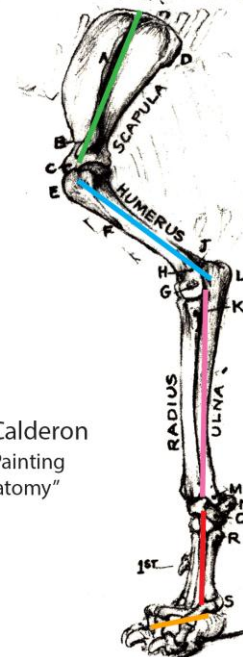
61. BONES OF FORE LIMB OF HORSE



BONES OF FORE LIMB OF LION



ARM OF MAN



BONES OF FORE LIMB OF DOG

W. Frank Calderon  
"Animal Painting  
and Anatomy"

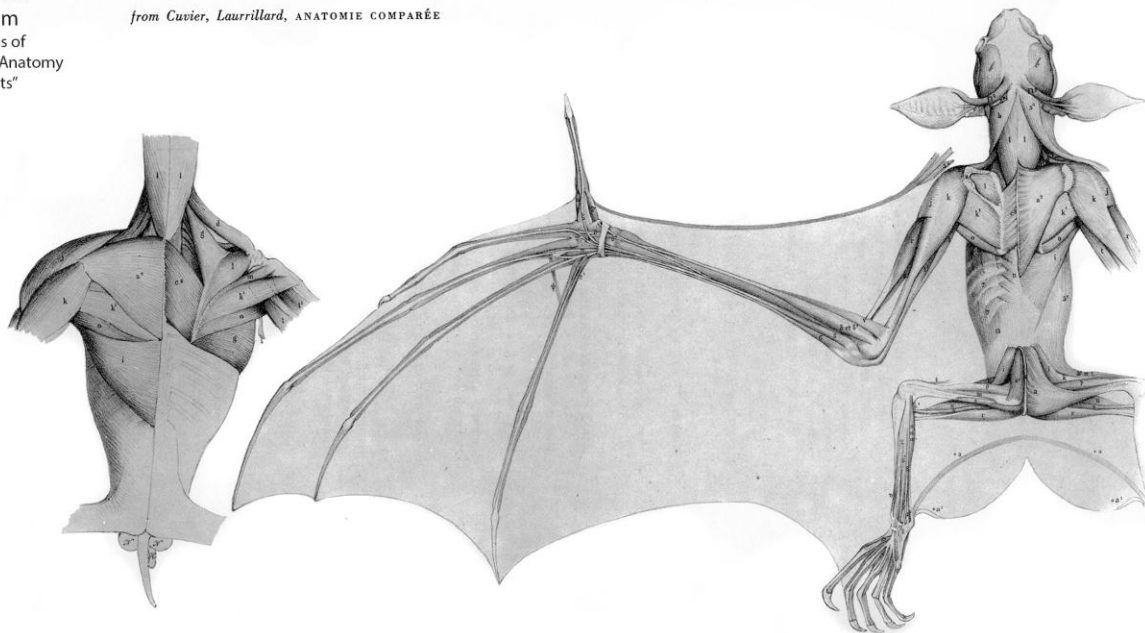


# Comparative Anatomy- Bat

W. Ellenberger  
H. Dittrich  
H. Baum  
"An Atlas of  
Animal Anatomy  
for Artists"

## THE BAT (CUVIER)

*from Cuvier, Laurillard, ANATOMIE COMPARÉE*

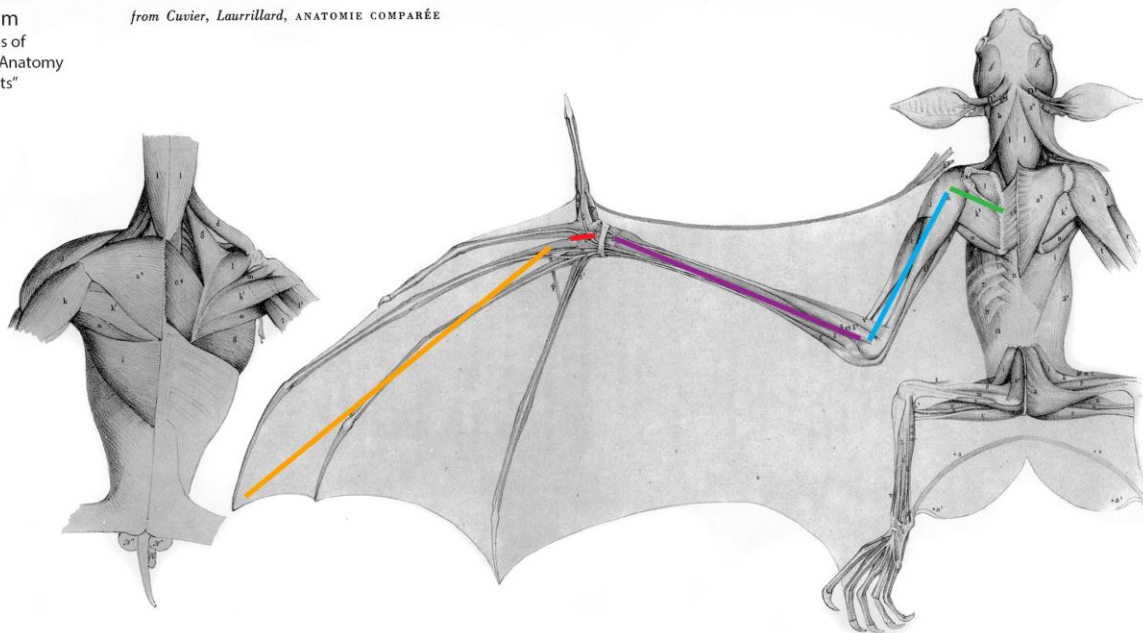


# Comparative Anatomy- Bat

W. Ellenberger  
H. Dittrich  
H. Baum  
"An Atlas of  
Animal Anatomy  
for Artists"

## THE BAT (CUVIER)

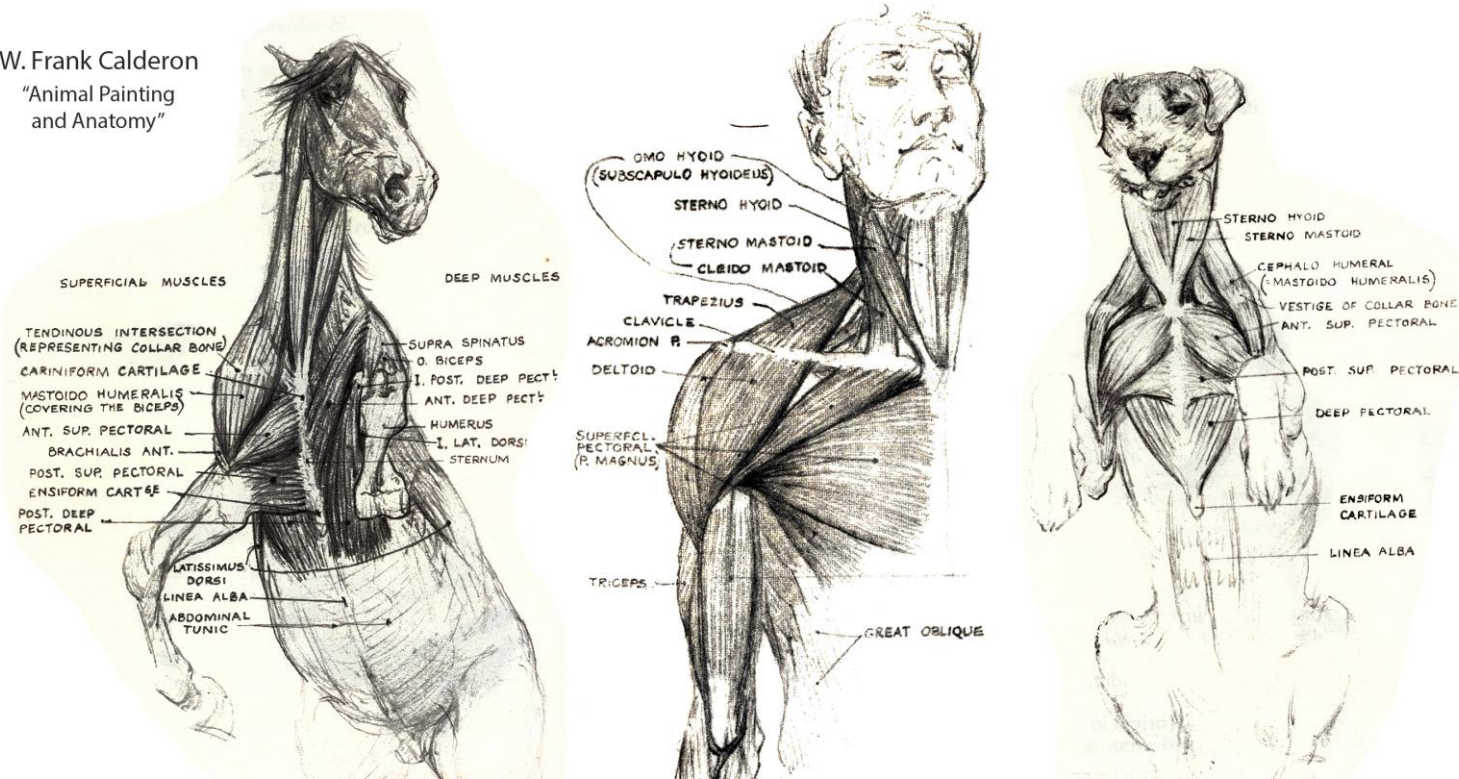
*from Cuvier, Laurillard, ANATOMIE COMPARÉE*



# Comparative Anatomy- Torso

W. Frank Calderon

"Animal Painting  
and Anatomy"

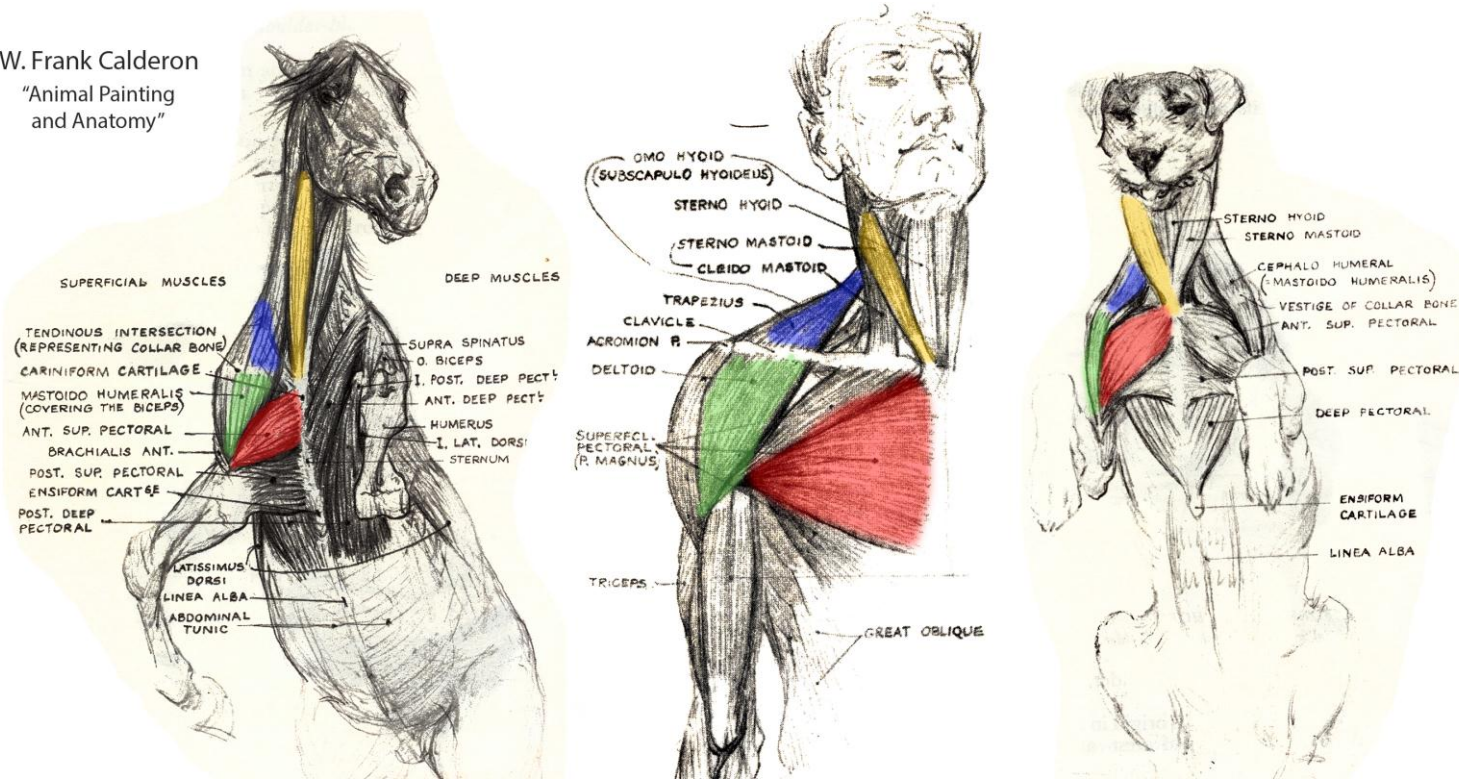




# Comparative Anatomy- Torso

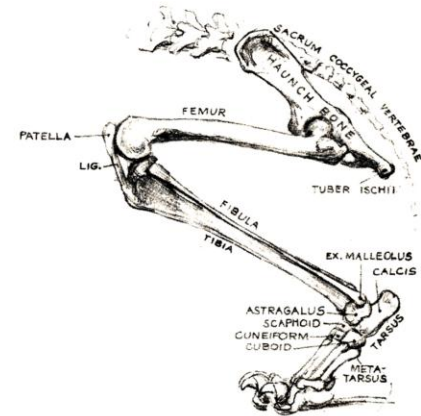
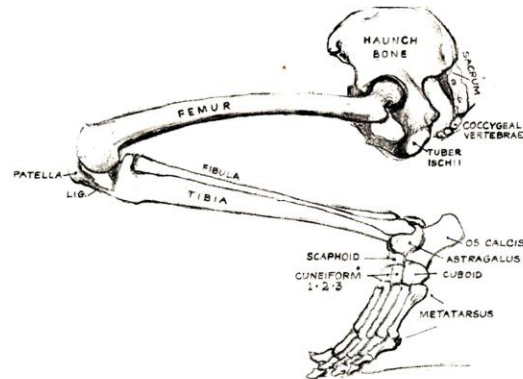
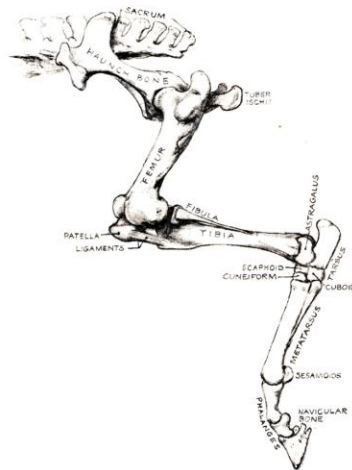
W. Frank Calderon

"Animal Painting  
and Anatomy"

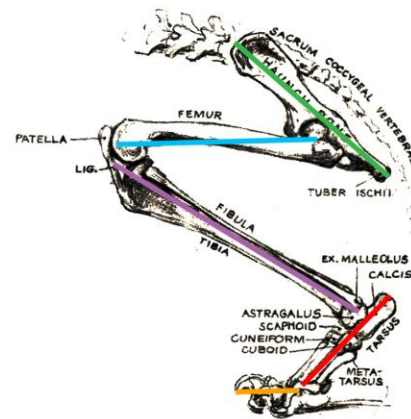
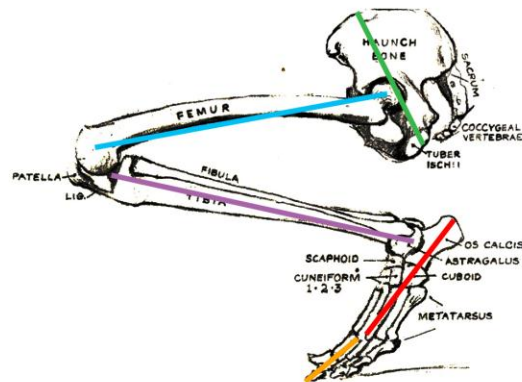
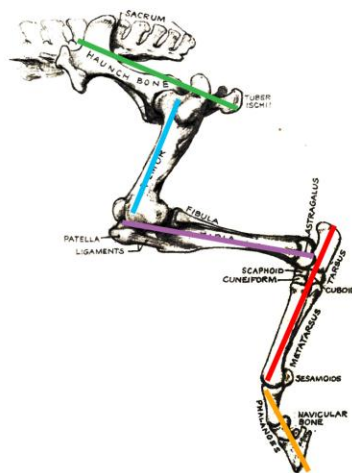




# Comparative Anatomy- Legs



# Comparative Anatomy- Legs



W. Frank Calderon  
"Animal Painting  
and Anatomy"



# Understanding anatomy in Movement

The Visible Horse, Anatomy in Motion: Susan E. Harris

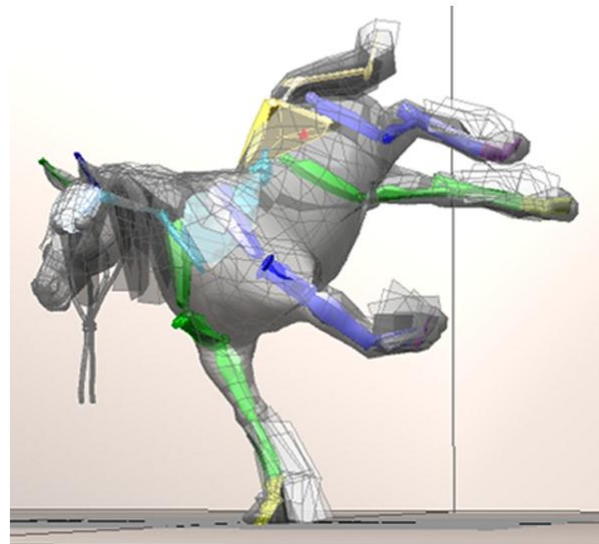


# Breaking The Skeleton Down to More Manageable Components

- Understand the use of the Character
  - NPC dialogue, interactive or close range?  
Highest Possible Bone Count
  - Combat- Quick close range? Mid-Range Bone Count
  - Ambient- Close or Far? Interactive or not?  
Lowest Possible Bone Count.

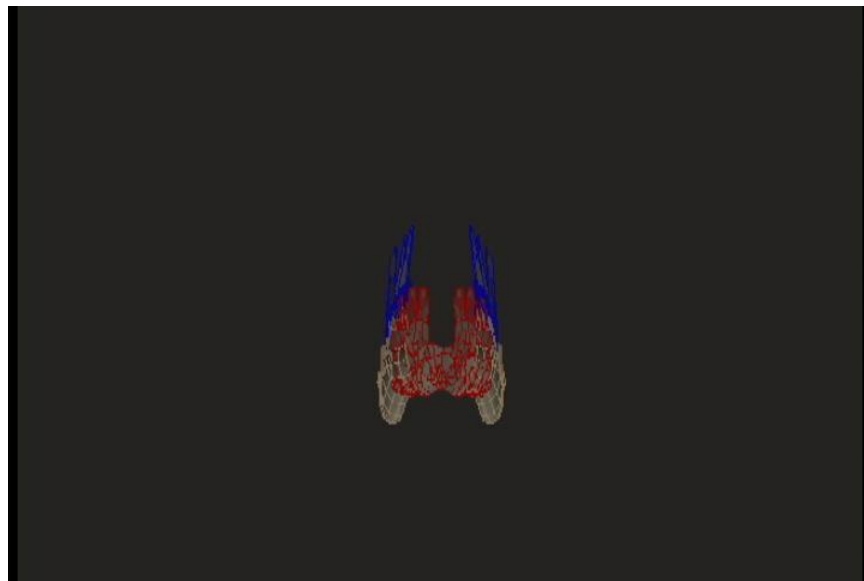


# Breaking The Skeleton Down to More Manageable Components

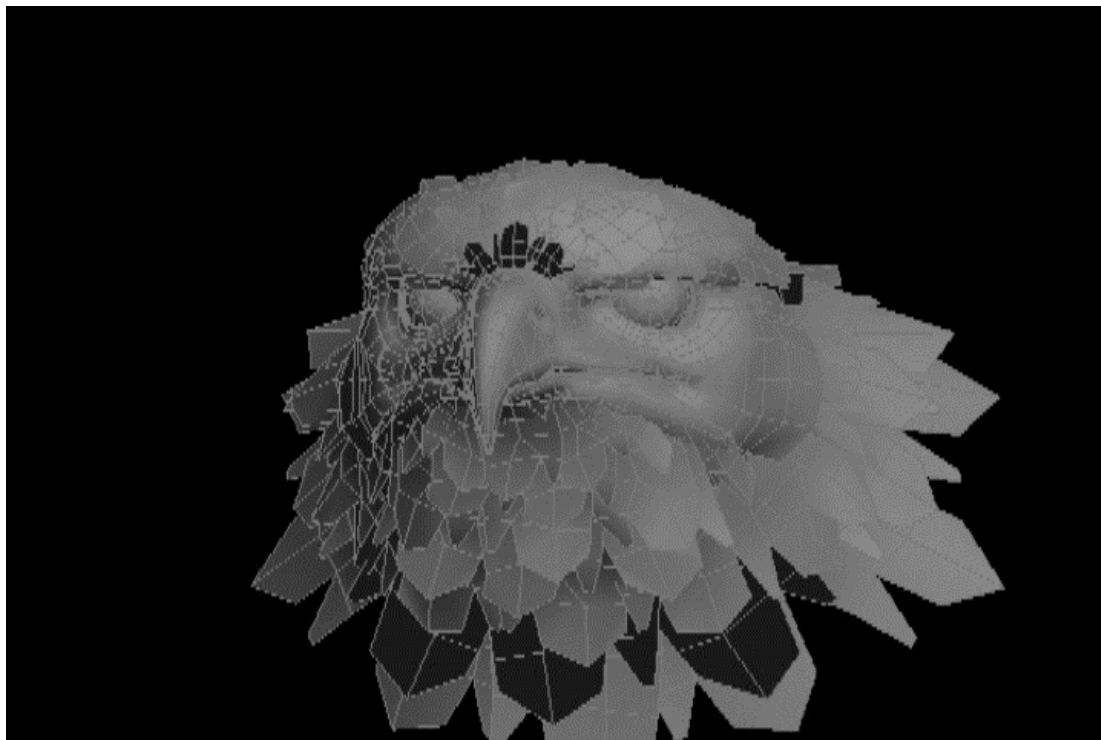




# The Great Eagle- LotR WitN



# The Great Eagle- LotR WitN



# Animation: An Overview of Base Movement in Animals

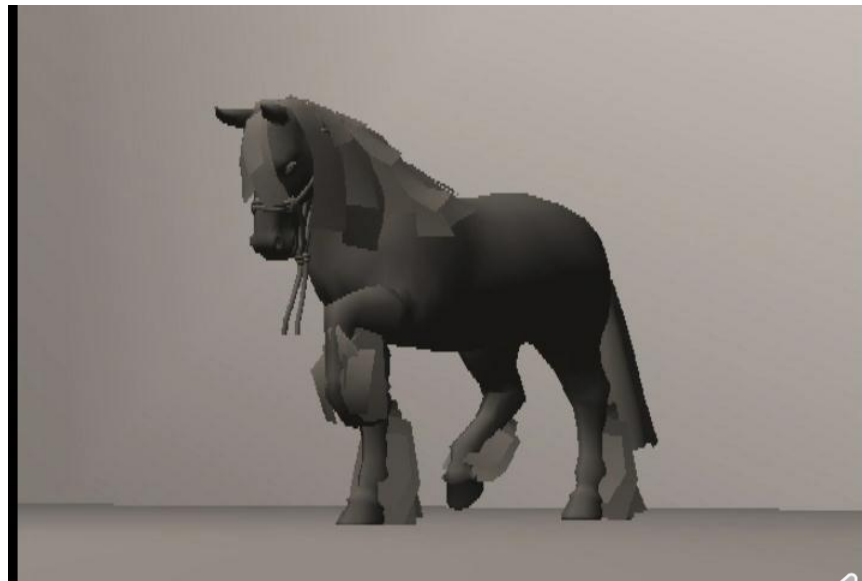
- Quads: A Breakdown of Gaits
- Avians: A Movement Walkthrough
- Bringing this information to life



# Walk



# Trot

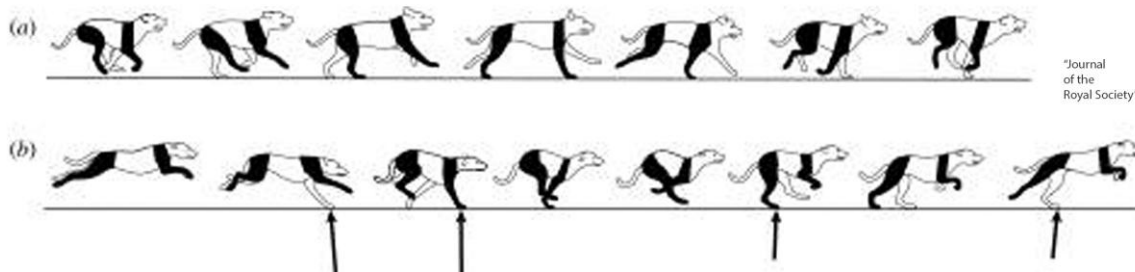
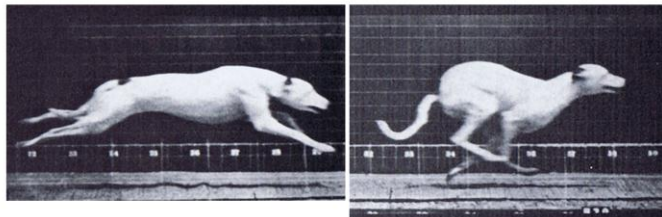




# Quads: Gallop (Transverse and Rotary)



Eadweard Muybridge  
"Animals in Motion"



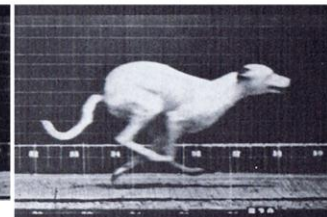
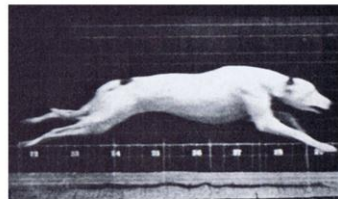
"Journal  
of the  
Royal Society"



# Quads: Gallop (Transverse and Rotary)



Eadweard Muybridge  
"Animals in Motion"



Single  
Suspension



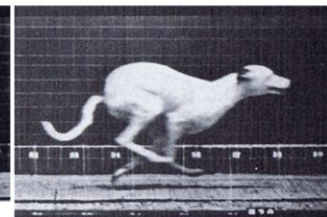
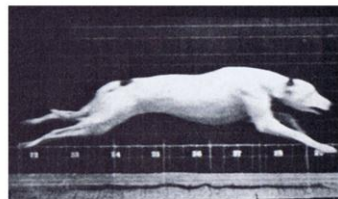
"Journal  
of the  
Royal Society"



# Quads: Gallop (Transverse and Rotary)

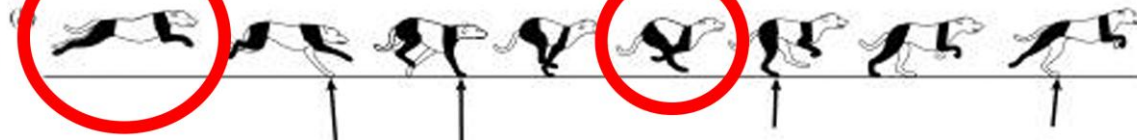


Eadweard Muybridge  
"Animals in Motion"



"Journal  
of the  
Royal Society"

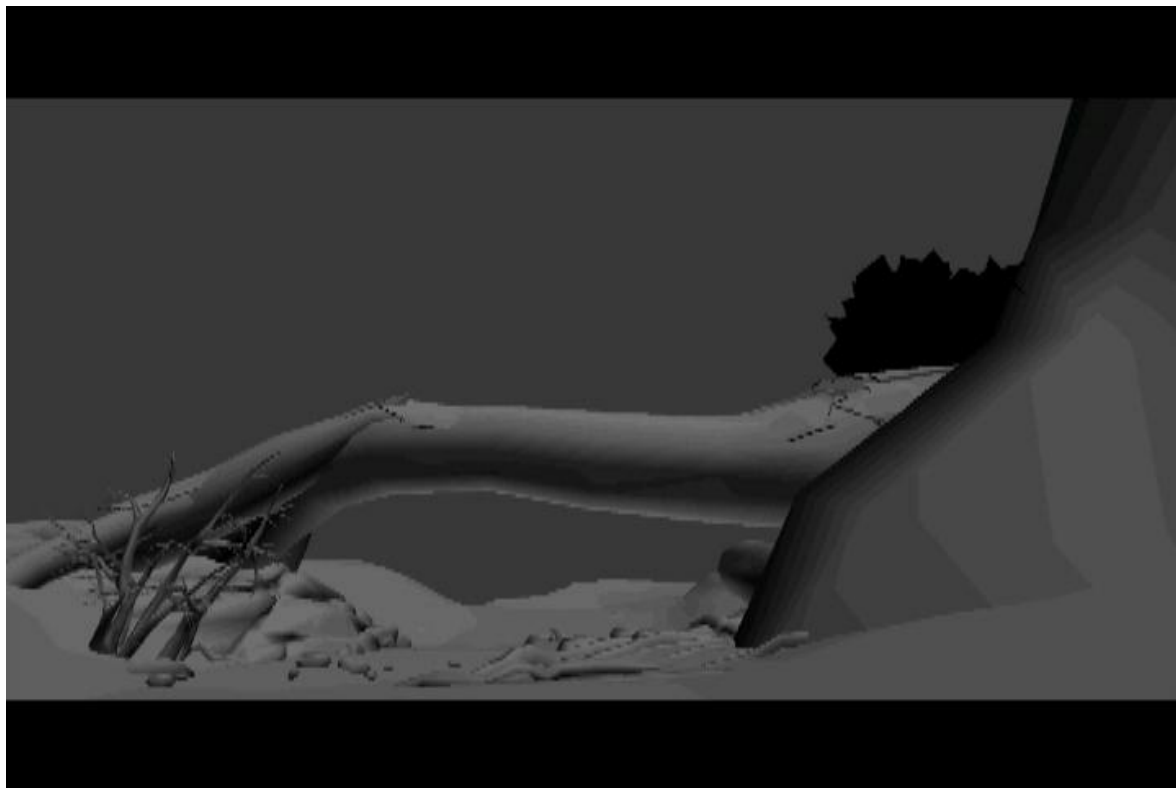
Double  
Suspension



# Run



# Bringing this basic information to life





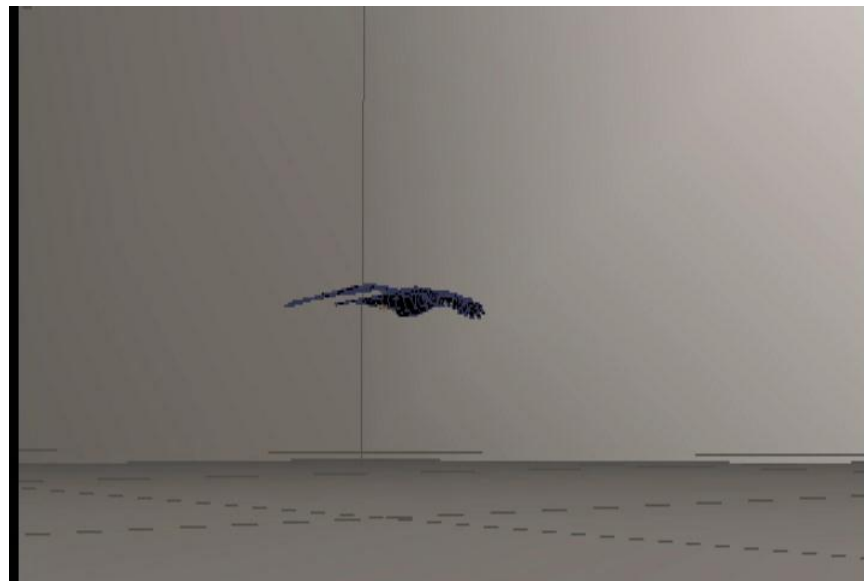
# Forward flight



# Takeoff



# Landing



# Bringing this basic information to life



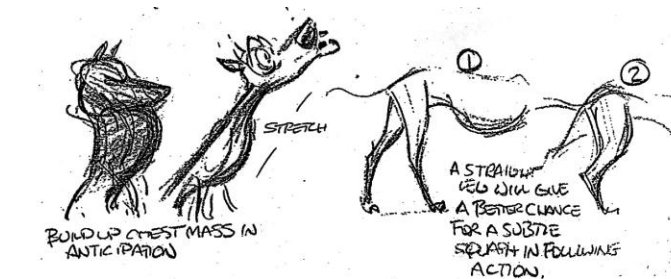
# Emoting

- Understanding and Developing Your Character
- Body Posture and Silhouette
- Breaking Down Facial Expression and Dialogue in Animals

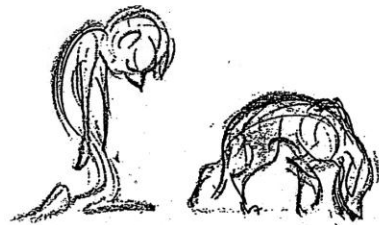




# Body Posture and Silhouette- Disney Notes



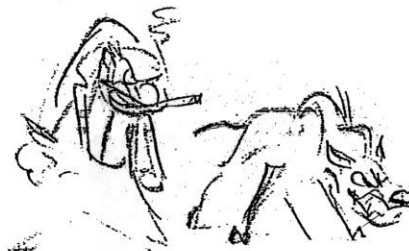
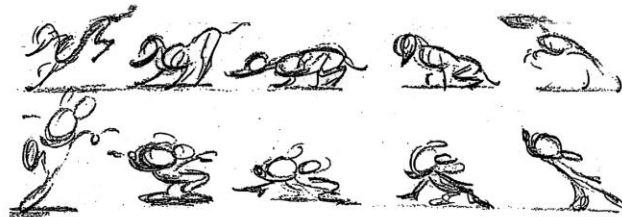
IF YOU AREN'T SURE OF HOW TO DRAW AN ATTITUDE - DRAW IT USING A SIMPLER 2-LEGGED CHARACTER FIRST.



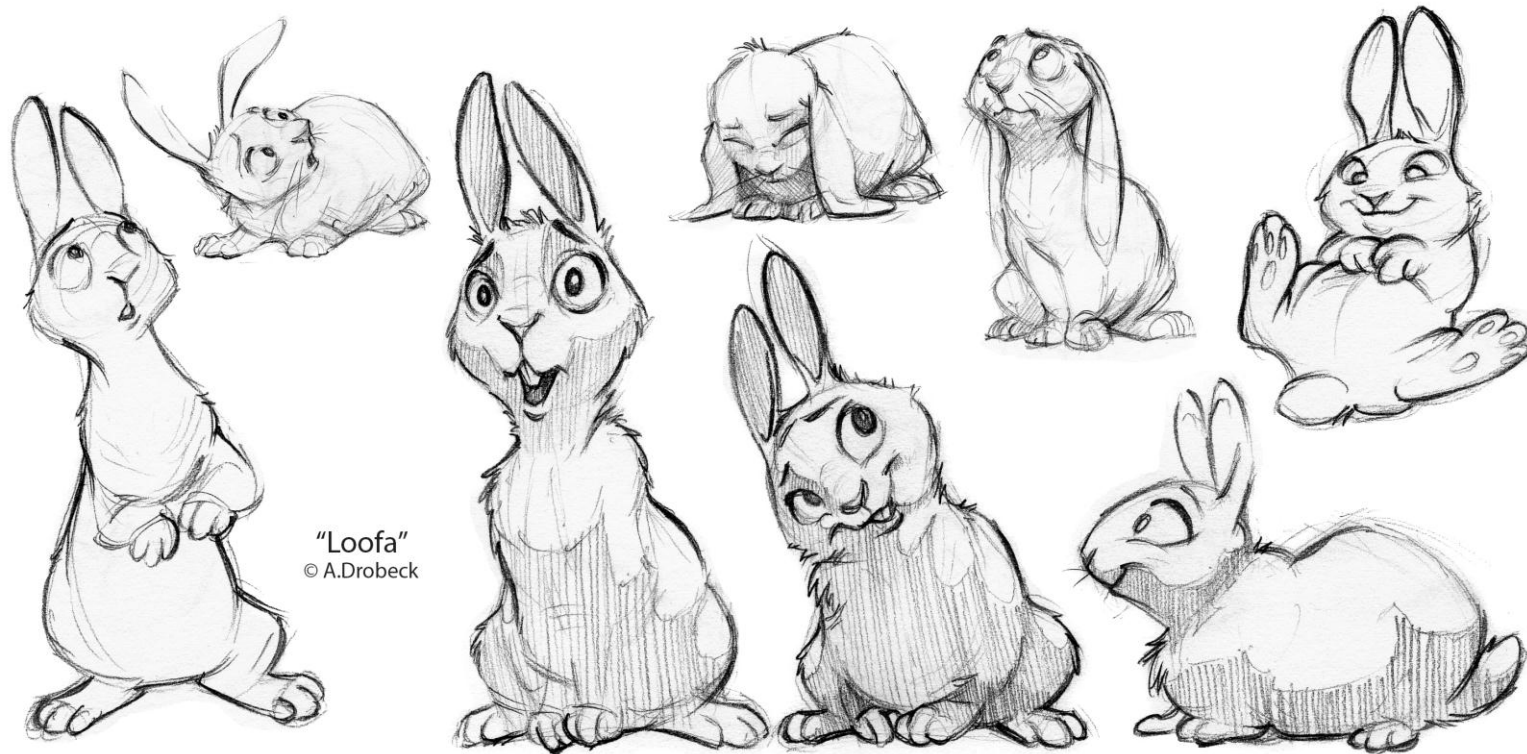
LET ENTIRE BODY REFLECT ATTITUDE



WDFA Animation Notes



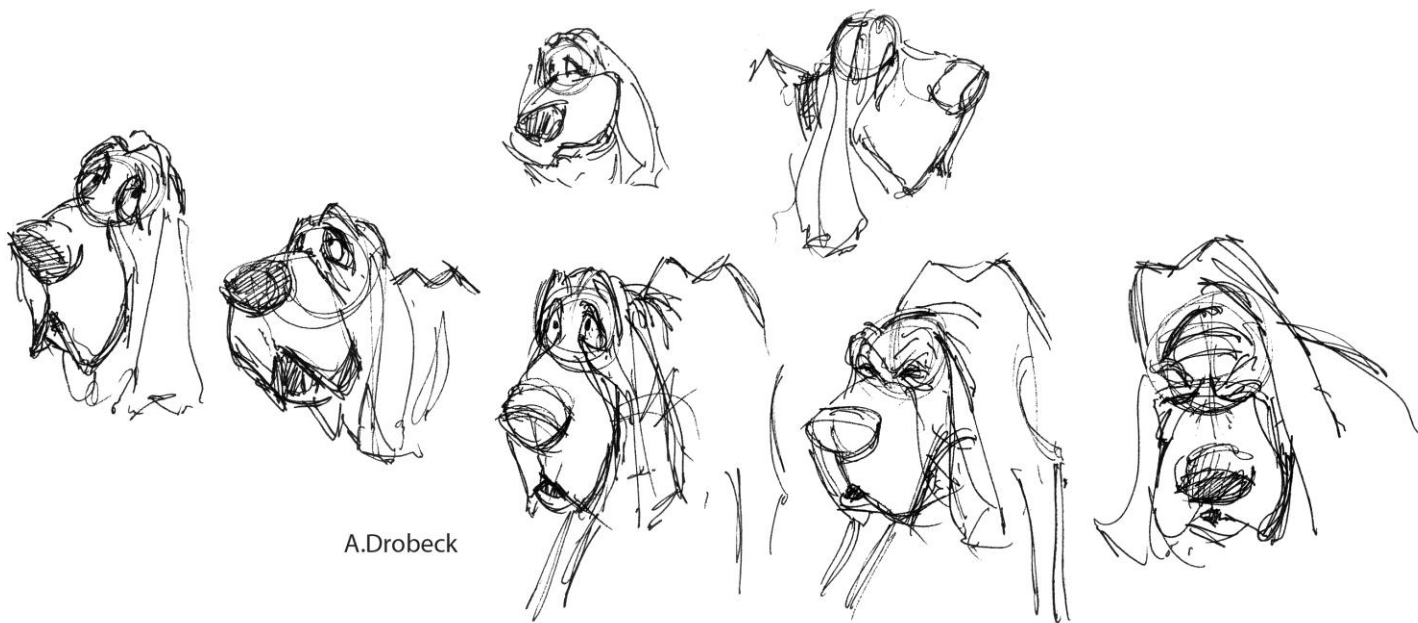
# Body Posture and Silhouette- Developing your Character



# Body Posture and Silhouette- Developing your Character



# Breaking Down Facial Expression and Dialogue in Animals



A.Drobeck





## Breaking Down Facial Expression and Attitude





# Great Eagle Dialogue



# Cinematics: Telling the Story

## Steps to Creating a Cinematic Sequence

- Plan and Communicate
  - Storyboards
- Set-up & Block-in of components
  - Iterate, Iterate, Iterate!!!



# Cinematics: Telling the Story

- Plan and Communicate
  - Why is this sequence in the game? What is the drive? (Story)
  - What is the entertainment potential? Where can that be emphasized? (Design)
  - What should I have the character do? How can I best show it? (Animation, EFX & Layout)
  - Know EXACTLY what you want before you start! (Approval)



# Cinematics: Telling the Story

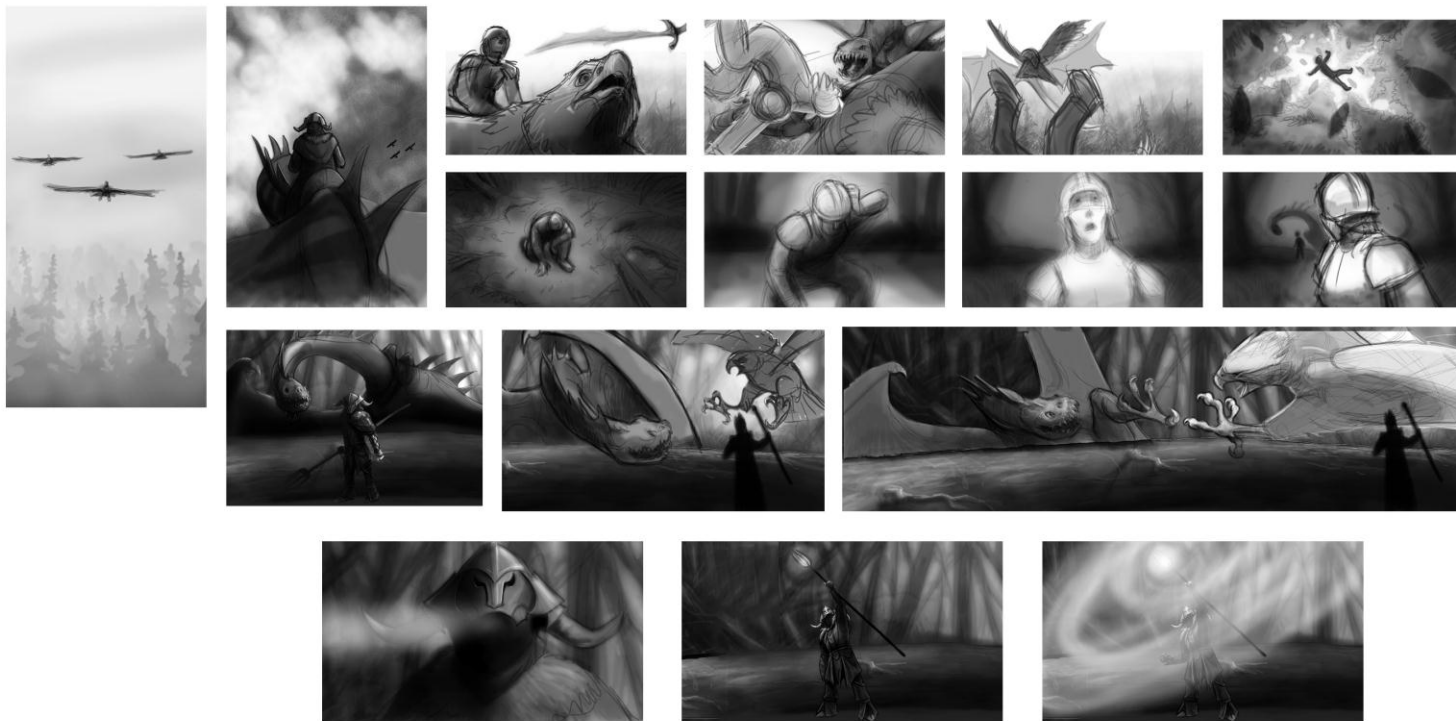
## Storyboards

- What is the layout & how are the characters posed in this environment? Are there any action dynamics to be considered. What is the game action before and after the shots? How are the characters positioned? Check continuity.
- Plan on who/what will be on camera and when (again, be conscious of tempo).
- Start thinking of shot variations (long, close-up, medium, pan, truck-in/out, etc.). Emphasize tension, placement relationships. Look for opportunities to get depth and perspective- Avoid too many scenes in a row that are flat on and repetitive.
- Pace the cuts appropriately- Slower thoughtful scenes should have shots timed that way. Faster action scenes need timing that reflects the action. General rule: Cuts should happen during action, switching POV during conversation or representing cause then effect.



# Cinematics: Telling the Story

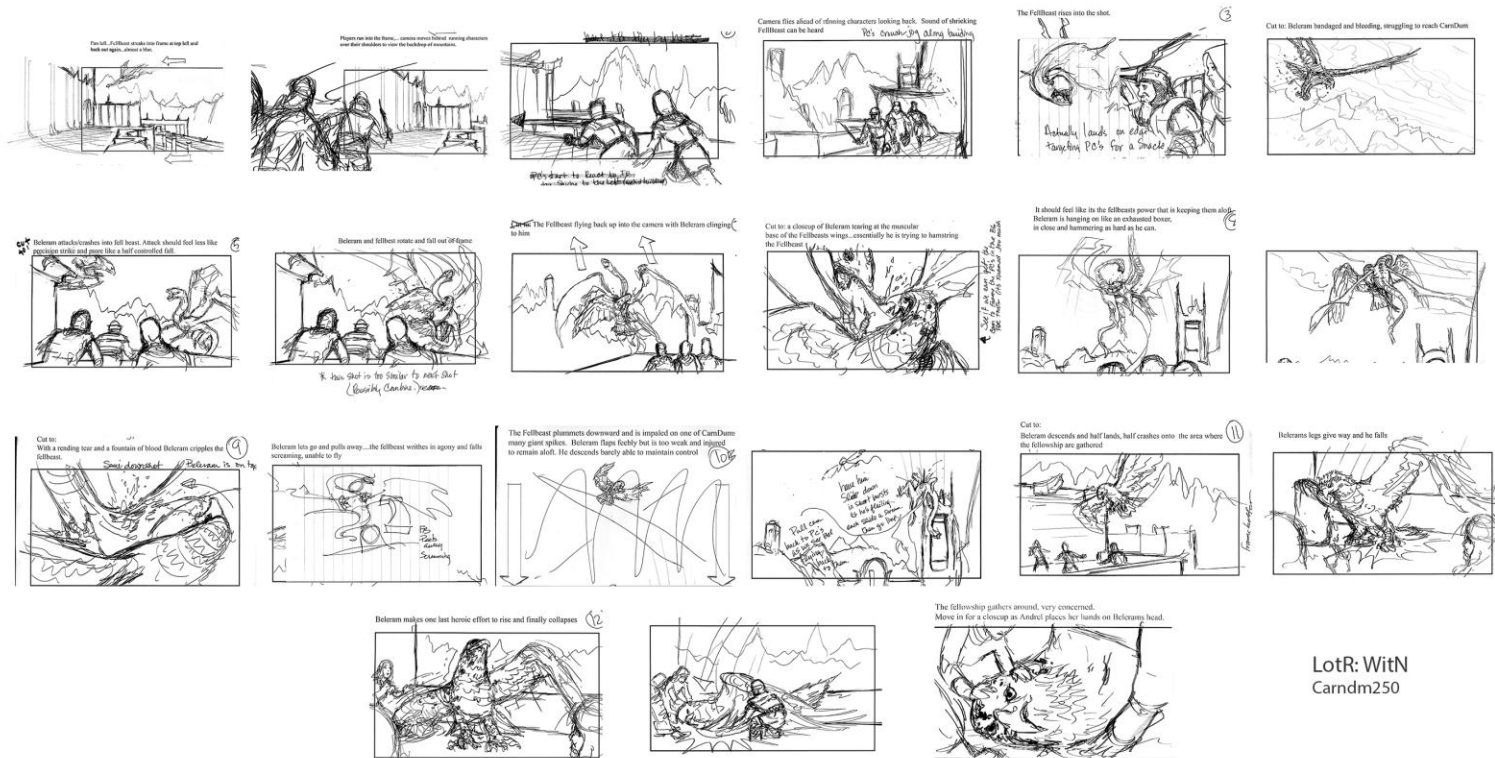
## Storyboards





# Cinematics: Telling the Story

## Storyboards



# Cinematics: Telling the Story

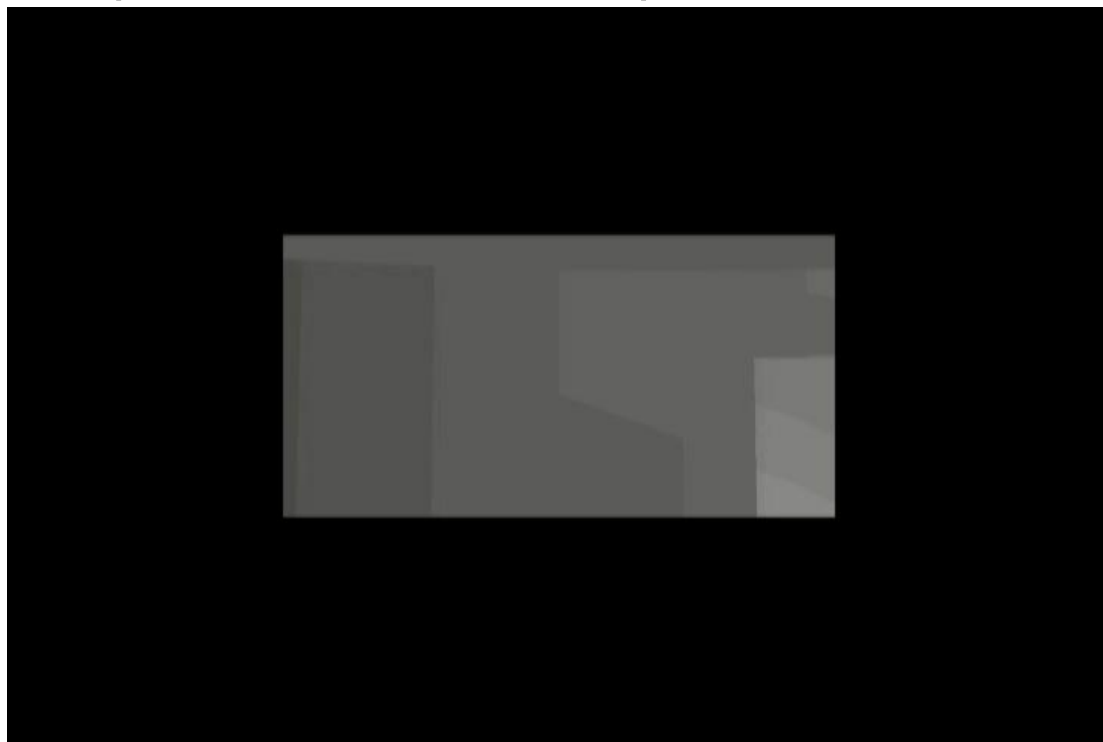
## Set-up & Block-in of components

- Start blocking in the shots using a low poly proxy of the environment the sequence takes place in. Set up character positions and prop planning. Start setting up composition of shots to check for environmental restrictions.
- Check your layout and make sure it will work as planned. Are there environment art issues? Is additional Environment art needed? Are there any clipping issues? Are there any EFX needed? Start plotting EFX markers to represent timing and placement.



# Cinematics: Telling the Story

Set-up & Block-in of components: Animatics



# Cinematics: Telling the Story

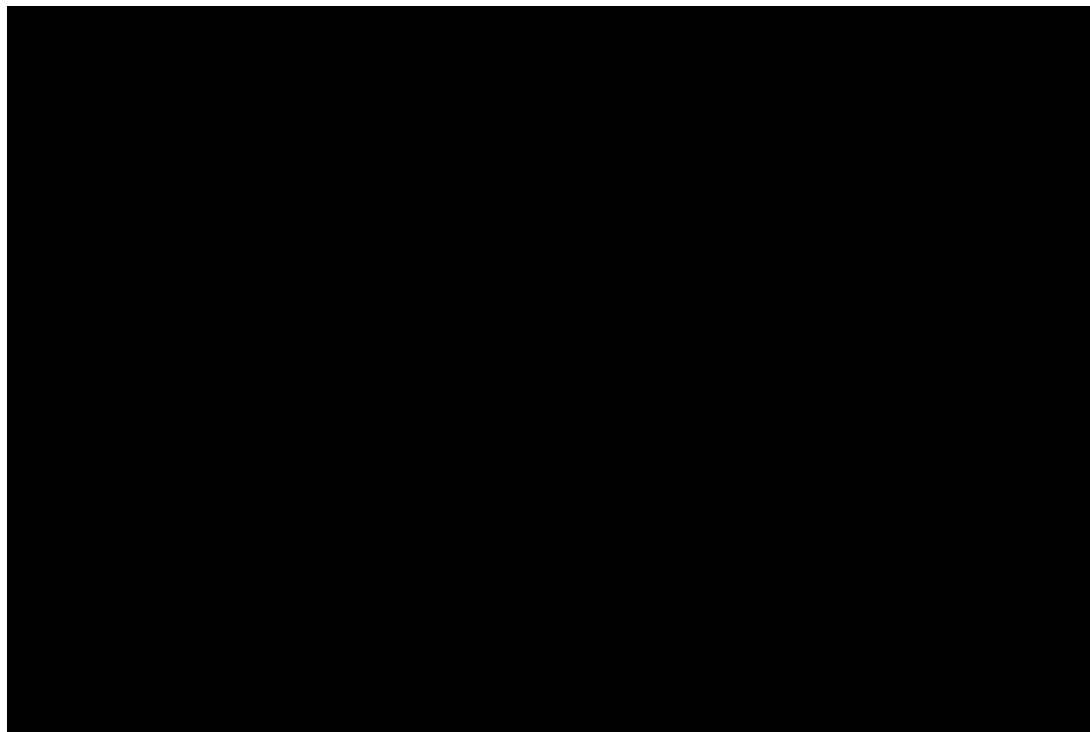
## Iterate, Iterate, Iterate

Once the sequence has been base approved and all requirements checked, start adding the thumbnail poses explored earlier to the characters, and start cleaning up the timing of the shots. I find it much easier to animate the cameras at the same time as the characters- this way the action of both can evolve together.



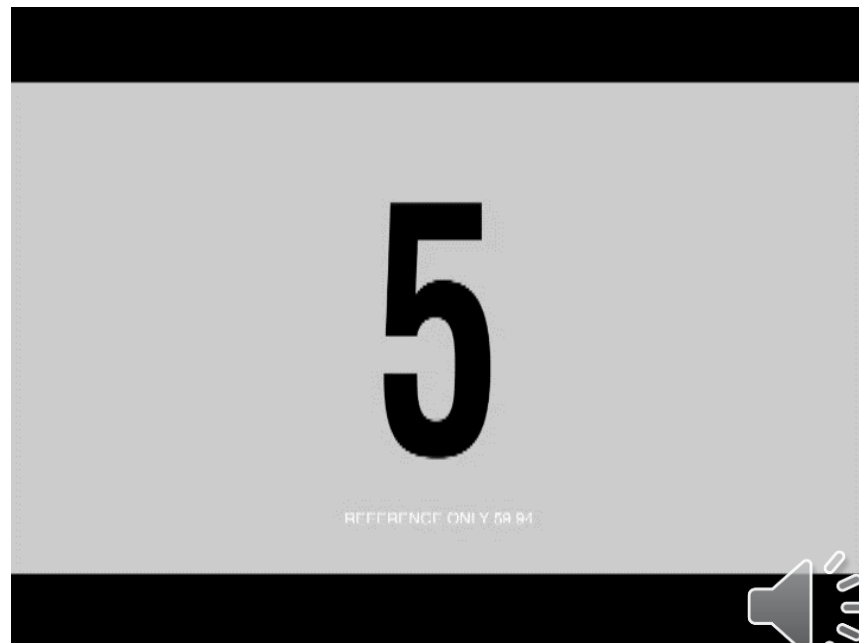
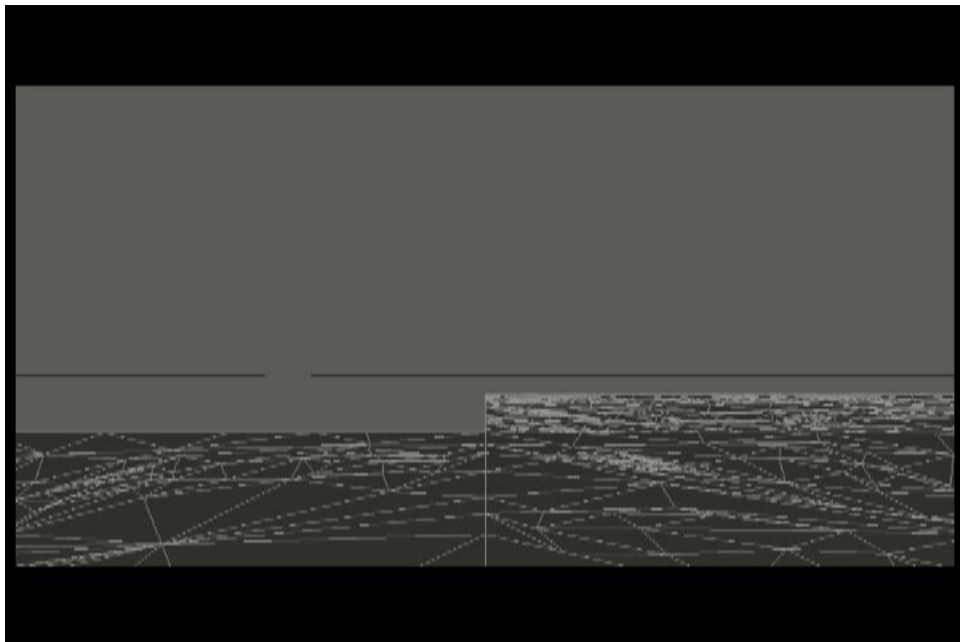
# Cinematics: Telling the Story

## Iterate: Storyboard



# Cinematics: Telling the Story

## Iterate: Realization





# Cinematics: Telling the Story

Iterate: Realization



# Library

**Animals in Motion**

Eadweard Muybridge  
Dover

**Illusion of Life: Disney Animation**

Frank Thomas and Ollie Johnson  
Hyperion

**Drawn to Life Vol. 1 & 2: 20 years of Disney master classes**

Walt Stanchfield  
Edited by Donn Hahn  
Focal Press

**The Animators Survival Kit: A Manual of Methods, Principles and Formulas**

Richard Williams  
Faber & Faber

**Constructive Anatomy**

George B. Bridgman  
Dover

**An Atlas of Anatomy for Artists**

Fritz Schider  
Dover

**The Art of Animal Drawing: Construction, Action Analysis, Caricature**

Ken Hultgren  
Dover

**Animal Painting and Anatomy**

W. Frank Calderon  
Dover

**An Atlas of Animal Anatomy for Artists**

W. Ellenberger, H. Dittrich, H. Baum  
Dover

**Bridgman's Complete Guide to Drawing From Life**

George B. Bridgman  
Sterling

**Birds of Prey**

Floyd Scholz  
Stackpole Books

**Design Yourself**

Kurt Hanks, Larry Belliston, Dave Edwards  
William Kaufman inc.

**The United States Pony Club Manual of Horsemanship Vol. 1, 2 & 3**

Susan E. Harris  
Howell Book House

**Complete Horse Riding Manual**

William Micklem  
DK

**The Ultimate Encyclopedia of Mythology**

Arthur Cotterell & Rachel Storm  
LB

**After Man: A zoology of the Future**

Dougal Dixon/ Desmond Morris  
St. Martin's Press

**The Science of Aliens**

Clifford Pickoover

ANYTHING Desmond Morris:

**Peoplewatching:** The Desmond Morris Guide to Body Language (2002)

**Animalwatching:** A New Guide to the Animal World

**The Human Animal** (1994) — book and BBC documentary TV series

**Horsewatching** (1989)

**Dogwatching** (1986)

**Catwatching:** & Cat Lore (1986)

